



*The Educational Activities of the  
European Geosciences Union*

*Carlo Laj*

*Chairman*

*EGU Committee on Education*

*Istanbul, March 28, 2014*

The Committee on Education of EGU was created in 2002 with the purpose of developing educational activities at EGU.

1) Geosciences Information for Teachers (GIFT) workshops

(At the EGU General Assemblies and more recently at Alexander von Humboldt topical Conferences)

2) Educational sessions at EGU General Assemblies (teachers and scientists and sciences educators)

3) Gift Distinguished Lectures series

4) Teachers at sea

5) Foster collaborations between schools

Typically:

80 participants

20 countries

8-9 conferences

2 half-days practical works with ESA experts

4 oral teacher-to-teachers communications

40-45 teachers' posters

1 visit to local institutions in Vienna (UNOOSA, IAEA...)

Visit and reception at the Vienna Museum of Natural History







European Geosciences Union

<http://gift.egu.eu/gift-symposia.html>

2009

**Topic: The Earth from Space**

Programme Presentations Brochure Web Conferences

2008

**Topic: The Carbon Cycle**

Programme Presentations Brochure

2007

**Topic: Geosciences in the city**

Programme Presentations Brochure

2006

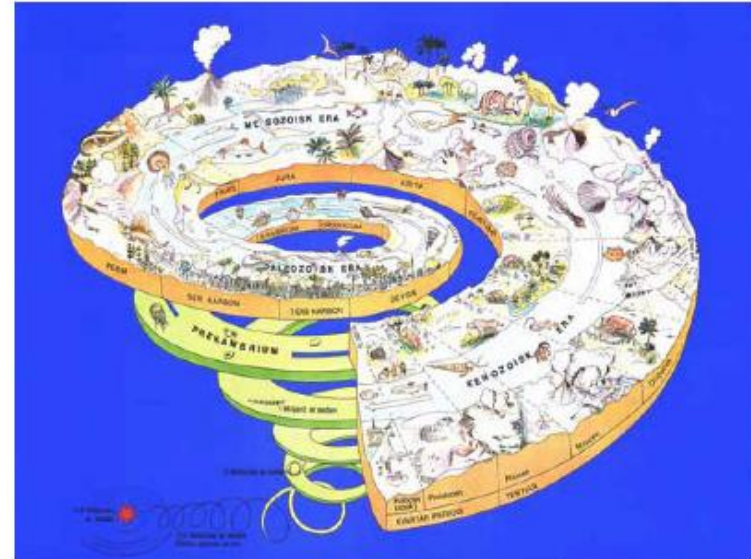
**Topic: The Polar Regions**

Programme Presentations Brochure

2005

**Topic: The History of the Earth**

Programme Presentations Brochure



*The time spiral, ©Sveriges geologiska undersökning (SGU)  
Permission 30-109/2005 from the Geological Survey of Sweden*

GIFT - 2005

# The History of the Earth

*Geophysical Information for Teachers Workshop*

*Vienna, Austria, 26-27 April 2005*



**European Geosciences Union**

<http://gift.egu.eu/gift-symposia.html>

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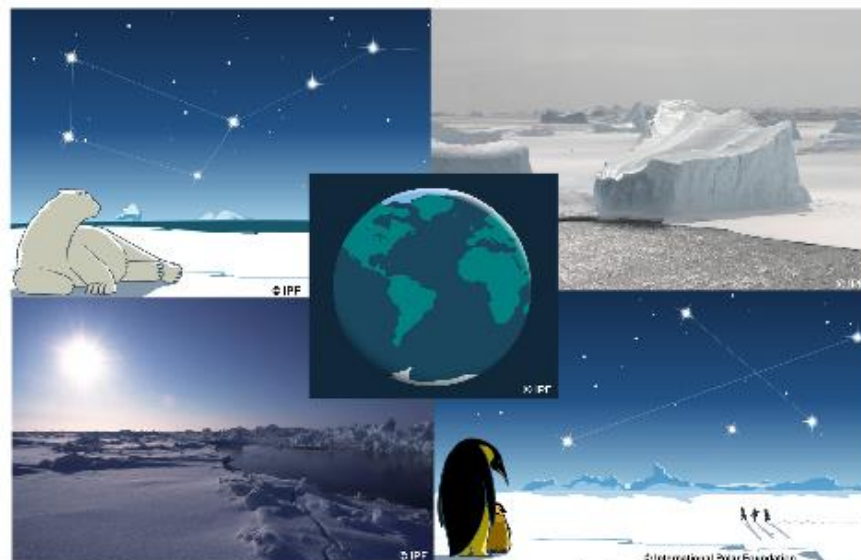
**Topic: The Polar Regions**

Programme Presentations Brochure

2005

**Topic: The History of the Earth**

Programme Presentations Brochure



*Courtesy of the International Polar Foundation*

*GIFT - 2006*

*The Polar Regions*

*Geophysical Information for Teachers Workshop*

*Vienna, Austria, 3-5 April 2006*



European Geosciences Union

<http://gift.egu.eu/gift-symposia.html>

2009

**Topic: The Earth from Space**

Programme Presentations Brochure Web Conferences

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**Topic: The Carbon Cycle**

Programme Presentations Brochure

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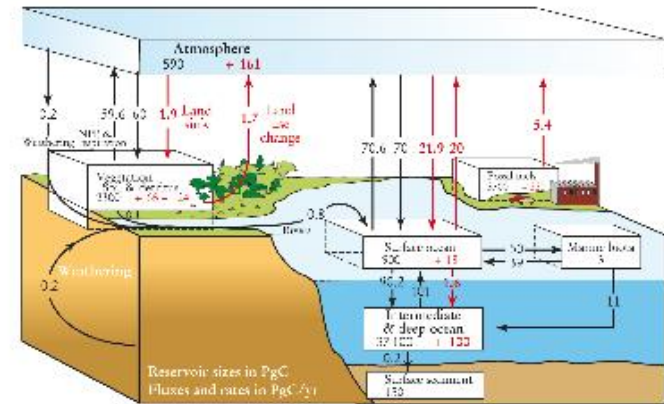
**Topic: The Polar Regions**

Programme Presentations Brochure

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Programme Presentations Brochure



Reprinted with permission from: Sarmiento and Gruber, *Physics Today*, 55 (8), 2002  
Copyright (2002), American Institute of Physics

GIFT - 2008

*The Carbon Cycle*

*Geosciences Information for Teachers Workshop*

*Vienna, Austria, 14 - 16 April 2008*



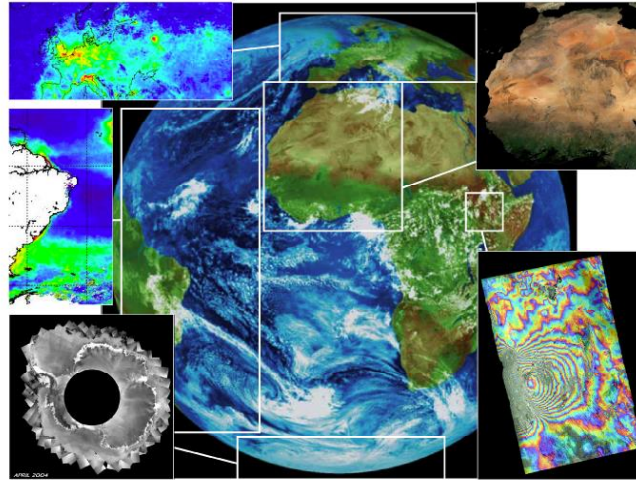
GIFT - 2010

« Energy and sustainable development »





# European Geosciences Union



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*GIFT - 2009*

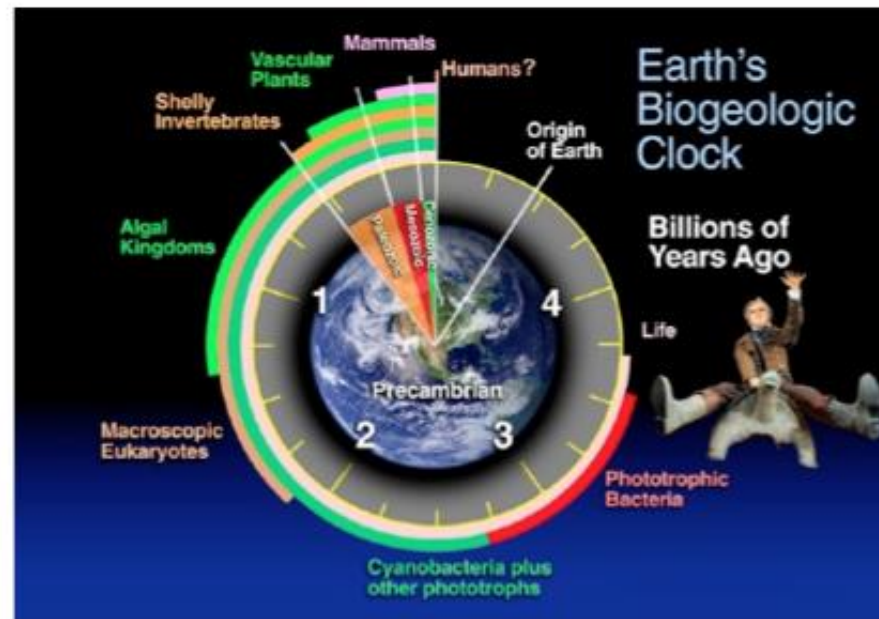
## *The Earth from Space*

*Geosciences Information for Teachers Workshop  
Vienna, Austria, 19-22 April 2009*



European Geosciences Union

Committee on Education



*GIFT - 2011*

*Evolution and Biodiversity*

*Geosciences Information for Teachers Workshop*

*Vienna, Austria, 3-6 April 2011*



**European Geosciences Union**

**Committee on Education**



*GIFT - 2012*

*Water!*

*Geosciences Information for Teachers Workshop  
Vienna, Austria, 23-25 April 2012*

*Room 29 - Green level*



**European Geosciences Union**  
**GIFT – Geosciences Information For Teachers**



*GIFT - 2013*

*Natural Hazards*

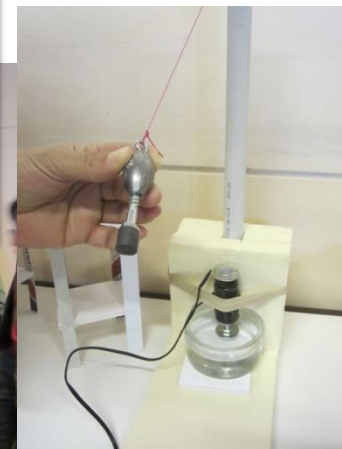
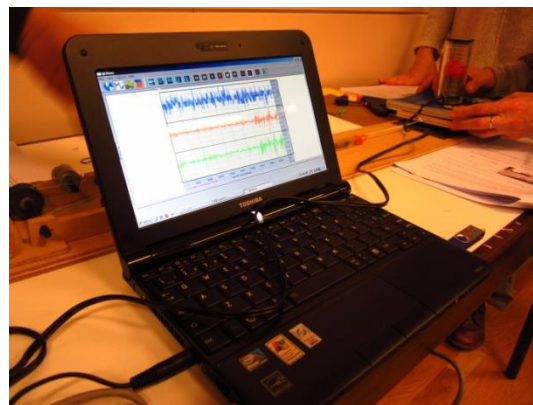
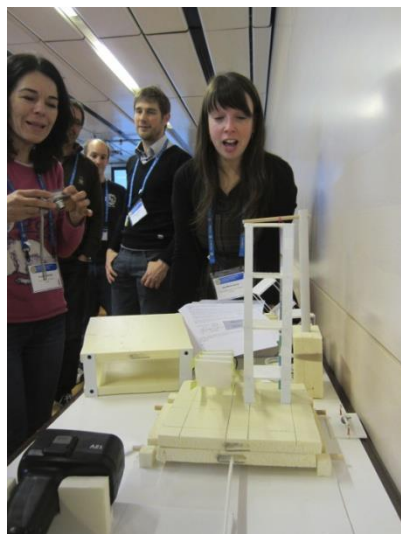
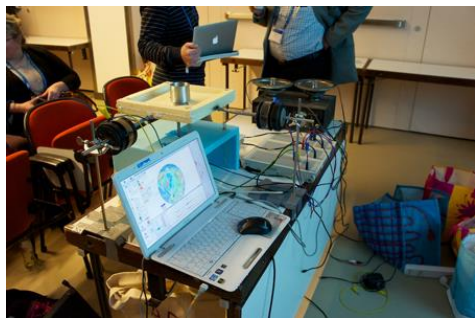
*Geosciences Information for Teachers Workshop*  
*Vienna, Austria, 7-10 April 2013*





# GIFT Workshop

Vienna 7 – 10 abril 2013







27

# ROCK WEATHERING AND CARBON CYCLE

Patrick Brozza - Lytle International Georges Duby - Luynes (France)

European educational observatory for environment

CO<sub>2</sub> consumption by Silicate weathering

$$\text{CaSiO}_3 + \text{H}_2\text{O} + 2\text{CO}_2 \rightarrow \text{Ca}^{2+} + \text{SiO}_2 + 2\text{HCO}_3^-$$

CO<sub>2</sub> release by Carbonate precipitation

$$2\text{HCO}_3^- + \text{Ca}^{2+} \rightarrow \text{CaCO}_3 + \text{H}_2\text{O} + \text{CO}_2$$

Measurement of HCO<sub>3</sub><sup>-</sup> concentration

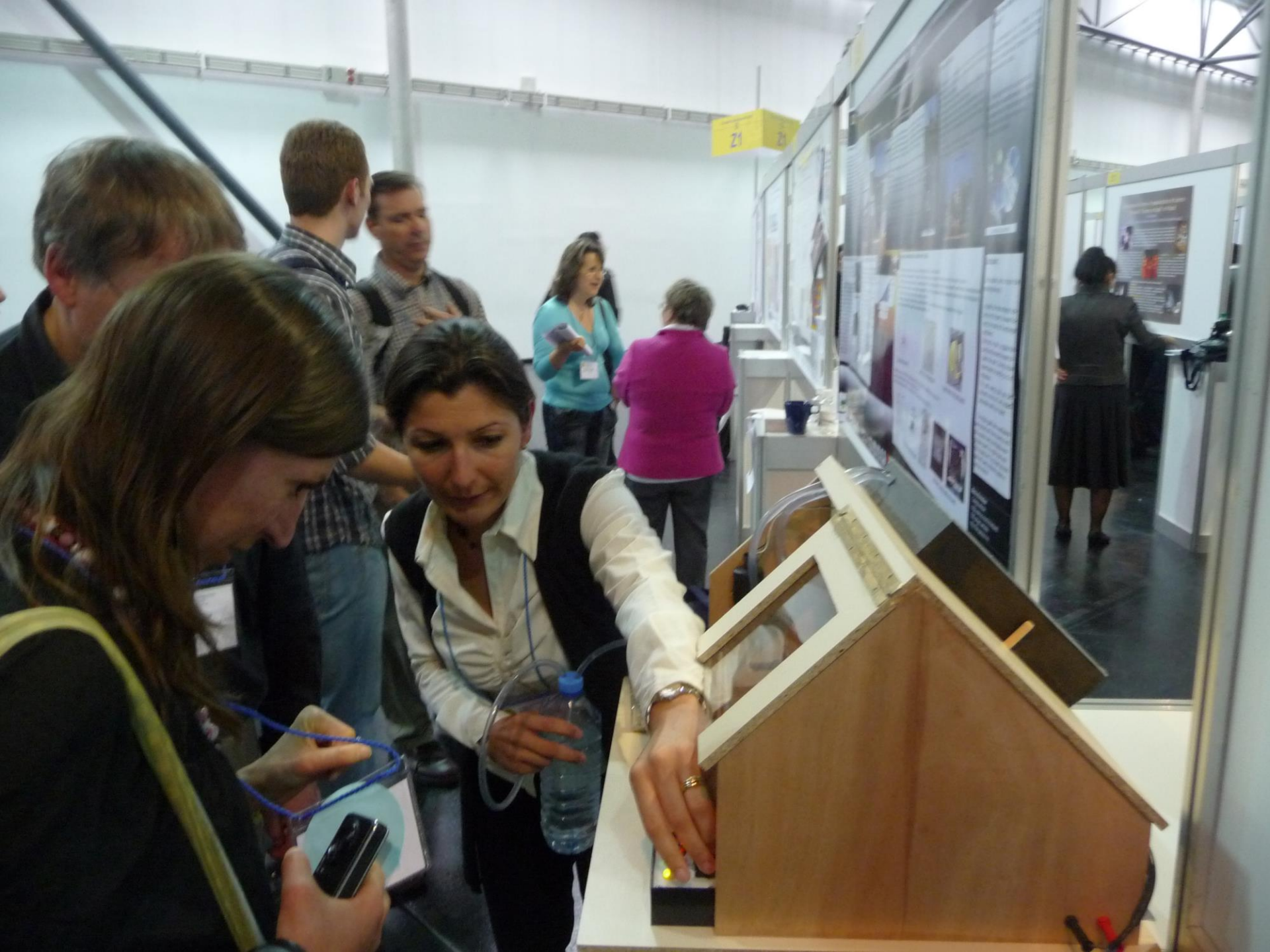
of atmospheric CO<sub>2</sub> that arises from processes

to regulate the Carbon fluxes



23

Research information for teachers (GFT) available at the Euro General Association





# Webstream

<http://www.egu.eu/education/gift/workshops/>

*And for 2014...*



Earth science education initiative in Africa



esa



Nelson Mandela Metropolitan University

# GIFT AFRICA

Geosciences  
Information  
for  
Teachers

## Climate Change and Human Adaptation

**February 26-28th 2014**

African Earth Observatory Network  
Nelson Mandela Metropolitan University  
Port Elizabeth  
South Africa

A UNESCO-EGU-ESA collaboration



## High Impact Natural Hazards Related to the Euro-Mediterranean Regions



Istanbul 1894 Earthquake: the Bazar

Geosciences Information For Teachers Workshop  
Istanbul, Turkey, 27-28 March 2014





**European Geosciences Union**  
Committee on Education



*GIFT - 2014*

*Our Changing Planet*

*Geosciences Information for Teachers Workshop  
Vienna, Austria, 27-30 April 2014*

*And for 2015...*

**EGU Alexander von Humboldt Conference 2015**  
and associated **EGU–GIFT Workshop**  
Addis Ababa (Ethiopia)

Organized by:  
European Geosciences Union  
Addis Ababa University

**Water–Food–Energy**  
**River and Society in the Tropics**

Tentative period: **September/October 2015**



ETHIOPIAN INSTITUTE OF  
WATER RESOURCES  
ADDIS ABABA UNIVERSITY

10th EGU  
Alexander von Humboldt International Conference



GIFT - 2015

Water - Food - Energy  
River and Society in the Tropics  
Geosciences Information for Teachers Workshop

Adis Ababa, Ethiopia, October 2015

GIFT - 2015 Workshop Vienna

« Mineral Resources of the Earth »

<http://www.egu.eu/education/gift/workshops/>

education@egu.eu

*At least 2 places will be reserved  
for Turkish teachers!*

*Please keep in contact and look at the EGU  
Committee on Education web site!*

*Selected teachers will be entirely sponsored  
by the Committee on Education of EGU  
(travel and living expenses)*

*Selection is based on the curriculum,  
including description of activities  
« off-the-official » program done with  
the students!*

*Teshekur  
ederim!*

[education@egu.eu](mailto:education@egu.eu)